



## Culminating Task: What am I Drinking?



Now that you know the identity of your contaminant, you will research the effects of your contaminant on the environment and on humans. You will also research how our drinking water is treated as well as the economic cost of treating water and the social and environmental costs if water is not properly treated.

This portion of the assignment requires you to create a video, using a program such as Animoto, or by creating a screencast using Jing or Camtasia, or by creating an online poster, using a program such as Glogster. If you have any other technologies you would like to use, please consult your teacher for approval.

The following information should be included in your video. You are encouraged to present the information as creatively as you can!

### **Part 2a: Research your Contaminant**

1. What is the maximum allowable concentration (MAC), according to drinking water standards, of the ion you found in your water sample?
2. What is the source of your contaminant?
3. How does your contaminant enter the water cycle?
4. Where does your contaminant go (i.e. does it sink into the sediment, stay in the water, get stored in fatty tissues, etc)?
5. How does your contaminant affect the ecosystem?
6. How does your contaminant affect humans?

### **Part 2b: Water Purification**

1. Where does our drinking water come from (be specific, as in here in North York)?
2. How is it treated before it comes to you (what is the purification process – what is added, removed, etc.)?
3. What is the location of your water treatment plant?
4. How much does it cost to treat our drinking water?
5. What activities take place in your watershed that may impact your drinking water? List any and all possible sources of point and non-point source pollution you can think of.
6. Where does your waste water go? How is it treated and what standards does it have to meet before it is returned to its original body of water?
7. Find a recent example of water contamination and discuss the social impact of contaminated water.

## Evaluation

Category	Criteria	Scale (Mark)
<b>Part 2 – [A] Content</b>	MAC of contaminant	0 1 2
	Source(s) of your contaminant	0 1 2
	How your contaminant enters the water cycle	0 1 2 3 4 5
	Where your contaminant ends up (see above)	0 1 2 3 4 5
	How your contaminant affects the ecosystem	0 1 2 3 4 5
	How your contaminant affects humans	0 1 2 3 4 5
	Source(s) of your drinking water	0 1 2
	Discussion of purification process	0 1 2 3 4 5 6 7 8 9 10
	Location of your water treatment plant	0 1 2
	Discussion of cost of treating drinking water	0 1 2 3 4 5
	Discussion of possible point and non-point sources of pollution in your watershed that impact your drinking water	0 1 2 3 4 5
	Discussion of where your waste water goes & how it is treated	0 1 2 3 4 5 6 7 8 9 10
	Discussion of recent example of contamination and discussion of social impact	0 1 2 3 4 5
<b>Part 2 - [C] Video</b>	Video is well organized	0 1 2 3 4 5
	Images are effectively used	0 1 2 3 4 5
	Video is visually appealing & creative	0 1 2 3 4 5
	Information is presented in a clear and concise manner	0 1 2 3 4 5
	Limited but effective use of words in video	0 1 2 3 4 5

### Comments:

#### Total:

Application: /68

Communication: /25